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(54) Title: RADIOLABELED CONJUGATES BASED ON SUBSTANCE P AND THE USES THEREOF

(57) Abstract: Radionuclide labelled conjugates based on substance P and analogues thereof with the chelator (DOTAGA) (1 -(1 -rарoxy-3-carboxy-propyl)-4,7, 10(carboxymethyl)- 1,4,7,10-tetraazacyclo-dodecane, DOTASA (1 -(1 -carboxy-2carboxy-ethyl)-4,7, 10 (carboxymethyl)1,4,7, 10-tetraazacyclo-dodecane, or chelator (DOTA) [1,4,7, 10 tetraazaacyclo-dodecane1,4,7, 1 0-tetra(acetic acid)] are useful radiopharmaceutical substances for targeting and treatment of brain tumors, especially gliomas.

INTERNATIONAL SEARCH REPORT

International Application No
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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K49/08 A61K51/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, CHEM ABS Data, EMBASE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/24235 A (POWELL PIA ;EISENWIENER KLAUS (DE); MAECKE HELMUT R (DE); MALLINCK) 28 March 2002 (2002-03-28) page 3, lines 1-29; claims 2,11-14 example 7; table 3	1,2, 10-15
X	WO 01/02021 A (ORTIZ ARMUA PEDRO) 11 January 2001 (2001-01-11) claims 5-9,14,20-22	1,2, 10-16
P,X	FICHNA J. ET AL: "Synthesis of target specific radiolabeled peptides for diagnostic imaging" BIOCONJUGATE CHEM, vol. 14, 2003, pages 3-17, XP001172817 page 11, paragraph 7; figures 1,8; tables 4,5	1,2, 10-15

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

* Special categories of cited documents :

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
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- *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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- *&* document member of the same patent family

Date of the actual completion of the international search

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
P, X	NIKULA, T. K. ET AL: "Improved method for labelling DOTA-analogues with 213Bi, 225Ac and lanthanides" ABSTRACTS OF PAPERS 225 ACS NATIONAL MEETING, 23 March 2003 (2003-03-23), - 27 March 2003 (2003-03-27) page Nuc1-067, XP008023978 abstract	1,2, 13-15
A	LAZNICEK M ET AL: "Octreotide and octreotate derivatives radiolabeled with yttrium: Pharmacokinetics in rats." CANCER BIOTHERAPY AND RADIOPHARMACEUTICALS, vol. 17, no. 5, 2002, pages 527-533, XP008023912 ISSN: 1084-9785 page 533, column 1, paragraph 2; figure 1	1-16
A	EP 1 283 216 A (MALLINCKRODT INC) 12 February 2003 (2003-02-12) example 3	1-16
A	HEPELER A ET AL: "RECEPTOR TARGETING FOR TUMOR LOCALISATION AND THERAPY WITH RADIOPEPTIDES" CURRENT MEDICINAL CHEMISTRY, BENTHAM SCIENCE PUBLISHERS BV, BE, vol. 7, no. 9, 2000, pages 971-994, XP000982225 ISSN: 0929-8673 page 986, column 1; table 1	1-16

INTERNATIONAL SEARCH REPORT

International application No.
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 1–13 are directed to a method of treatment of the human/animal body/ diagnostic method practised on the human/animal body, Article 52(4) EPC), the search has been carried out and based on the alleged effects of the compound/composition
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/050329

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